

treatment, and drinking water supplies. Each of the environmental programs has a database for central office work, but access by FO staff has often proven difficult. Historically each office developed their own tracking methods, usually by paper, MS Access or Excel.

A single tracking system is needed to ensure consistency across the six regional field offices, to coordinate work across the dozen environmental programs, and provide access to attorneys, managers, facility owners/operators, banks and others.

Expected Results in this Product:

- Develop the Field Office Compliance database system to schedule and track inspections, complaint investigations, assistance, work requests, incoming reports, deficiencies, and other staff actions.
- Integrate the FO Compliance database with the DNR One Stop data warehouse to coordinate work across programs, and provide interactive maps on the website.

Project Funds:

- Funds from IOWAccess have been used for a detailed description of business requirements, use cases, and screen mockups.
- A request is on the agenda for the IOWAccess Council for \$240,000 for implementation.

Benefits:

- Ability to see the total compliance history for a facility at a glance
- Ability to more easily prioritize efforts and manage resources
- Save time spent by FO staff
 - Typing in duplicate facility information from program databases
 - Typing in numbers for 120 activities for the Monthly Field Office Activity Report which would be automatically generated by a report from the new database
 - Searching multiple databases or paper for each request by the Department of Economic Development to check a company's compliance history before loaning money
 - Writing emails between departments to request or provide information on the status/details of a compliance issue.
 - Researching paper or individual FO files for legislative/management/EPA requests for statewide information.

B. Strategic Plan: How does the proposed project fit into the strategic plan of the requesting agency?

This project fits two themes of the Strategic Plan for the Environmental Services Division:

- **Communities:** Empowering communities to protect the local environment and health of their citizens. This project will help communities identify where problems exist in complying with environmental regulations.
- **Risk:** Focusing our activities on conditions with the greatest potential to adversely impact human health and the environment. This project will improve the availability and accessibility of risk-based information.

C. Current Technology: Provide a summary of the technology used by the current system. How does the proposed project impact the agency's technological direction? Are programming elements consistent with a Service Oriented Architecture (SOA) approach? Are programming elements consistent with existing enterprise standards?

This system will meet agency standards by being a new database in SQL Server with a web front end. Currently FOs track items in individually developed MS Access and MS Excel databases.

This project will use Environmental Data Standards Council (EDSC)-approved data standards, including: Facility Identification, Latitude/Longitude, Permitting Information, Enforcement/Compliance, and any other applicable standards.

It is consistent with the SOA approach, and information will be used in the SOA currently in effect with the US Environmental Protection Agency (EPA) where Iowa shares facility information with EPA using the National Environmental Information Exchange Network.

D. Statutory or Other Requirements

Is this project or expenditure necessary for compliance with a Federal law, rule, or order?

YES (If "Yes", cite the specific Federal law, rule or order, with a short explanation of how this project is impacted by it.)

Explanation: The Freedom of Information Act (FOIA) 5 U.S.C. 552 provides individuals with the right to inspect the records of public agencies. (Excluded from access are records that are confidential or exempt from disclosure under that act and other laws and regulations.) The law allows five working days to respond from the date a request is received in any office.

In making any record available to a person, an agency shall provide the record in a form or format requested by the person if the record is readily reproducible by the agency in that form or format. Each agency shall make reasonable efforts to maintain its records in forms or formats that are reproducible...

In responding to a request for records, an agency shall make reasonable efforts to search for the records in electronic form or format, except when such efforts would significantly interfere with the operation of the agency's automated information system.

Is this project or expenditure required by state law, rule or order?

YES (If "YES", cite the specific state law, rule or order, with a short explanation of how this project is impacted by it.)

Explanation: Iowa Code chapter 22.2 - Right to examine public records. By law every person shall have the right to examine and copy public records and a government body shall not prevent the examination. By allowing the records to be viewed online it will allow a wider audience to view at their convenience.

Does this project or expenditure meet a health, safety or security requirement?

YES (If "YES", explain.)

Explanation: This project allows individuals to review the facilities surrounding them to see how they may be impacting the health and safety of their families. It will also allow the public to view such items as their city's public drinking water violations.

Is this project or expenditure necessary for compliance with an enterprise technology standard? No, but we will comply.

YES (If "YES", cite the specific standard.)

Explanation:

[This section to be scored by application evaluator.]

Evaluation (15 Points Maximum)

If the answer to these criteria is "no," the point value is zero (0). Depending upon how directly a qualifying project or expenditure may relate to a particular requirement (federal mandate, state mandate, health-safety-security issue, or compliance with an enterprise technology standard), or satisfies more than one requirement (e.g. it is mandated by state and federal law and fulfills a health and safety mandate), 1-15 points awarded.



E. Impact on Iowa's Citizens

1. Project Participants - List the project participants (i.e. single agency, multiple agencies, State government enterprise, citizens, associations, or businesses, other levels of government, etc.) and provide commentary concerning the nature of participant involvement. Be sure to specify who and how many **direct** users the system will impact. Also specify whether the system will be of use to other interested parties: who they may be, how many people are estimated, and how they will use the system.

Direct Users:

- DNR Field office staff will enter data into the system and use it to schedule & track compliance actions 90
- Other DNR environmental staff will enter work requests into the system and check the status of related work 100
- Attorneys will check the compliance status of FO activities and prioritize enforcement actions
 - Attorney General's office, DNR and US Environmental Protection Agency (EPA) 20
 - in the private sector 200
- Environmental managers, both in the field and central office in DNR, will use it to analyze trends and allocate resources 30

Other Interested Parties:

- Facilities (or their banks) who want to check their environmental status for multiple permits or advertise their good environmental record. 30,000-50,000
- Citizens interested in nearby environmental activities and compliance efforts. 1,000
- Environmental Groups 5
- The local county health departments 99

2. Service Improvements - Summarize the extent to which the project or expenditure improves service to Iowa citizens or within State government. Included would be such items as improving the quality of life, reducing the government hassle factor, providing enhanced services, improving work processes, etc.

Improved work processes:

- Save time spent by FO staff
 - Typing in duplicate facility information from program databases.
 - Typing in numbers for 120 activities for the Monthly Field Office Activity Report which would be automatically generated by a report from the new database.
 - Time correcting information that was entered incorrectly.
 - Searching multiple databases or paper for each request by the Department of Economic Development to check a company's compliance history before loaning money.
 - Writing emails between departments to request or provide information on the status/details of a compliance issue.

- Researching paper or individual FO files for legislative/management/EPA requests for statewide information.

Reduce the government hassle factor:

- Ability to see the total compliance history for a facility at a glance

3. Citizen Impact – Summarize how the project leads to a more informed citizenry, facilitates accountability, and encourages participatory democracy. If this is an extension of another project, what has been the adoption rate of Iowa’s citizens or government employees with the preceding project?

The DNR FO Compliance Database application will make inspections, complaint and other compliance information available to the general public and DNR staff through the Internet, and across multiple environmental programs. For the first time, facilities will be easily accountable to citizens through the web. Currently, since so much information is buried in paper files in different field offices and for different programs, the process to get the information is so complex that it prevents most citizens from even attempting to get this information.

4. Public Health and/or Safety – Explain requirements or impact on the health and safety of the public.

The FO Compliance Database will help streamline processes used by DNR FO staff in some cases where environmental releases or hazards are investigated by FO staff, such as chemical spills, wastewater bypasses, and air emissions.

<p>[This section to be scored by application evaluator.] Evaluation (15 Points Maximum)</p> <ul style="list-style-type: none">• Minimally directly impacts Iowa citizens (0-5 points).• Moderately directly impacts Iowa citizens (6-10 points).• Significantly directly impacts Iowa citizens (11-15 points).	
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<p>[This section to be scored by application evaluator.] Evaluation (10 Points Maximum)</p> <ul style="list-style-type: none">• Minimally improves customer service (0-3 points).• Moderately improves customer service (4-6 points).• Significantly improves customer service (7-10 points).	
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F. Process Reengineering

Provide a pre-project or pre-expenditure (before implementation) description of the impacted system or process. Be sure to include the procedures used to administer the impacted system or process and how citizens interact with the current system.

Pre-Project Response:

One example is a request about the compliance status of a company with several facilities in Iowa, each with two to three different environmental permits.

- Citizens (including attorneys, bankers, environmental consultants, legislators and interested neighbors) call up on the phone and ask the field office staff for information.
- FO staff email all the centralized environmental program databases to request their staff search to see if they have a permit, and where the sites are. (Example: four sites, each

with an air quality permit, wastewater permit, and a registered underground storage tank.)

- Notify each of the Field Offices that have a site, and they would have to search paper files and each of the three program spreadsheets or local databases.
- Compile the information for a response.
- If they want more details, the process starts all over again.

Provide a post-project or post-expenditure (after implementation) description of the impacted system or process. Be sure to include the procedures used to administer the impacted system or process and how citizens will interact with the proposed system. In particular, note if the project or expenditure makes use of information technology in reengineering traditional government processes.

Post-Project Response:

For the same example:

- Citizens or staff search the system on the web for the name of the company. A list of results is immediately provided. Through hyperlinks, more details are provided about each site, the permits at each site, and the FO compliance status.
- Inspections increase and compliance is documented in less time.

[This section to be scored by application evaluator.]

Evaluation (10 Points Maximum)

- Minimal use of information technology to reengineer government processes (0-3 points).
- Moderate use of information technology to reengineer government processes (4-6 points).
- Significant use of information technology to reengineer government processes (7-10).



G. Timeline

Provide a projected timeline for this project. Include such items as **start date**, planning, database design, coding, implementation, testing, conversion, parallel installation, and date of final release. Also include the parties responsible for each item.

Pre-Project Planning

- Obtained initial IOWAccess funding for planning the project Nov. 2006
DNR has worked with ITE staff to produce use cases, detailed business requirements, screen mock-ups and a test plan.
- Put out a Request for Proposal for a contractor to implement the system Oct. 2007
- Get Environmental Protection Commission approval for the contract Dec. 2007

Implementation

- Contractor begin work Jan. 2008
The contractor will implement the following phases over a period of 6-14 months.
 - Detailed Design Plan
 - Database Development
 - Initial Application Development
 - Testing
 - Implementation in Production

- Documentation
- Post-Development Support

[This section to be scored by application evaluator.]

Evaluation (10 Points Maximum)

- The timeline contains several problem areas (0-3 points).
- The timeline seems reasonable with few problem areas (4-6 points).
- The timeline seems reasonable with no problem areas (7-10).

H. Funding Requirements

On a fiscal year basis, enter the estimated cost by funding source: Be sure to include developmental costs and ongoing costs, such as those for hosting the site, maintenance, upgrades.

	FY07		FY08		FY09	
	Cost(\$)	% Total Cost	Cost(\$)	% Total Cost	Cost(\$)	% Total Cost
State General Fund	\$0	0%	\$0	0%	\$0	0%
Pooled Tech. Fund /IOWAccess Fund	\$55,000	100%	\$187,560	100%	\$52,440	100%
Federal Funds	\$0	0%	\$0	0%	\$0	0%
Local Gov. Funds	\$0	0%	\$0	0%	\$0	0%
Grant or Private Funds	\$0	0%	\$0	0%	\$0	0%
Other Funds (Specify)	\$0	0%	\$0	0%	\$0	0%
Total Project Cost	\$55,000	100%	\$187,60	100%	\$52,440	100%
Non-Pooled Tech. Total	\$0	0%	\$0	0%	\$0	0%

[This section to be scored by application evaluator.]

Evaluation (10 Points Maximum)

- The funding request contains questionable items (0-3 points).
- The funding request seems reasonable with few questionable items (4-6 points).
- The funding request seems reasonable with no problem areas (7-10).

I. Scope

Is this project the first part of a future, larger project?

- YES (If "YES", explain.) NO, it is a stand-alone project.

Explanation:

Although we anticipate the need for future maintenance and expanded functionality as this whole new system becomes available and staff understands its potential for process improvement and performance measures, no specific future projects have been defined at this time.

Is this project a continuation of a previously begun project?

YES (If "YES", explain.)

Explanation:

DNR's One Stop project has integrated several environmental program databases. It will be used to populate the Field Office databases with the facility sites and related permit identifiers, as well as to provide a mapping component and act as a central warehouse to display summary information from the programs, Field Offices, and Legal staff. The FO compliance information is a crucial component of One Stop.

[This section to be scored by application evaluator.]

Evaluation (10 Points Maximum)

- This is the first year of a multi-year project / expenditure or project / expenditure duration is one year (0-5 points)
- The project / expenditure is of a multi-year nature and each annual component produces a definable and stand-alone outcome, result or product (2-8 points).
- This is beyond the first year of a multi-year project / expenditure (6-10 points)



The last part of this criteria involves rating the extent to which a project or expenditure is at an advanced stage of implementation and termination of the project / expenditure would waste previously invested resources.

J. Source of Funds

On a fiscal year basis, how much of the total project cost (\$ amount and %) would be absorbed by your agency from non-Pooled Technology and/or IOWAccess funds? If desired, provide additional comment / response below.

Response:

The application will be developed and deployed with 100% of IOWAccess funding. Ongoing hosting costs will be absorbed by the DNR through appropriate funding streams by program.

[This section to be scored by application evaluator.]

Evaluation (5 Points Maximum)

- 0% (0 points)
- 1%-12% (1 point)
- 13%-25% (2 points)
- 25%-38% (3 points)
- 39%-50% (4 points)
- Over 50% (5 points)



Section II: Financial Analysis

A. Project Budget Table

It is necessary to estimate and assign a useful life figure to each cost identified in the project budget. Useful life is the amount of time that project related equipment, products, or services are utilized before they are updated or replaced. In general, the useful life of hardware is three (3) years and the useful life of software is four (4) years. Depending upon the nature of the expense, the useful life for other project costs will vary between one (1) and four (4) years. On an exception basis, the useful life of individual project elements or the project as a whole may exceed four (4) years. Additionally, the ROI calculation must include all new annual ongoing costs that are project related.

The Total Annual Prorated Cost (State Share) will be calculated based on the following equation:

$$\left[\left(\frac{\text{Budget Amount}}{\text{Useful Life}} \right) \times \% \text{ State Share} \right] + (\text{Annual Ongoing Cost} \times \% \text{ State Share}) = \text{Annual Prorated Cost}$$

Budget Line Items	Budget Amount (1st Year Cost)	Useful Life (Years)	% State Share	Annual Ongoing Cost (After 1st Year)	% State Share	Annual Prorated Cost
Agency Staff	28,244	4	100%	0	100%	\$7,061
Software	240,000	4	0%	0	100%	0
Hardware						
Training						
Facilities						
Professional Services						
ITD Services						
Supplies, Maint, etc.						
Other						
Totals	\$268,244			0		\$7,061

B. Spending plan

Explain how the funds will be allocated.

Funds will be allocated 100% first year from IOWAccess and 100% thereafter, by DNR.

C. Tangible and/or Intangible Benefits

Respond to the following and transfer data to the ROI Financial Worksheet as necessary:

1. Annual Pre-Project Cost - This section should be completed only if state government operations costs are expected to be reduced as a result of project implementation.

Quantify actual state government direct and indirect costs (personnel, support, equipment, etc.) associated with the activity, system or process prior to project implementation.

Describe Annual Pre-Project Cost:

The inquiring, printing and distribution of paper information that is requested adds additional expenses to the DNR. The public and DNR can benefit from a web based database that will allow everyone the ability too readily view all compliance records.

Quantify Annual Pre-Project Cost:

	State Total
FTE Cost(salary plus benefits):	\$232,993.00
Support Cost (i.e. office supplies, telephone, pagers, travel, etc.):	\$0.00
Other Cost (expense items other than FTEs & support costs, i.e. indirect costs if applicable, etc.):	\$30,988.00
Total Annual Pre-Project Cost:	\$263,981.00

2. Annual Post-Project Cost - This section should be completed only if state government operations costs are expected to be reduced as a result of project implementation.

Quantify actual state government direct and indirect costs (personnel, support, equipment, etc.) associated with the activity, system or process after project implementation.

Describe Annual Post-Project Cost:

It is estimated that money could be saved annually by eliminating or reducing paper document reviews. Savings can be realized from reduced telephone calls and requests for information. Posting of permits, inspections and compliance history will enable the field office inspectors more time to conduct inspections. This central web based database is intended to reduce these costs.

This new system will also yield reports that would not have been possible with the old individual databases. This system will allow each facility to view their own compliance information and will allow them the ability to show off their compliance status.

This new systems allows us to improve our requirements for Freedom of Information Act.

Quantify Annual Post-Project Cost:

	State Total
FTE Cost(salary plus benefits):	\$0.00
Support Cost (i.e. office supplies, telephone, pagers, travel, etc.):	\$0.00
Other Cost (expense items other than FTEs & support costs, i.e. indirect costs if applicable, etc.):	\$0.00
Total Annual Post-Project Cost:	\$0.00

3. Citizen Benefit - Quantify the estimated annual value of the project to Iowa citizens. This includes the "hard cost" value of avoiding expenses ("hidden taxes") related to conducting business with State government. These expenses may be of a personal or business nature. They could be related to transportation, the time expended on the manual processing of governmental paperwork such as licenses or applications, taking time off work, mailing, or other similar expenses. As a "rule of thumb," use a value of \$10 per hour for citizen time.

Describe savings justification:

Currently the public has to request by mail with a fee or call and/or come in during regular business hours to review the files of facilities. This is very time consuming for the public and not user friendly. With the new web based system in place the amount of effort expended in

looking for information will be drastically reduced. With an electronic on line system, there is no time delay in accessing the information.

Transaction Savings	
Number of annual online transactions:	3240
Hours saved/transaction:	1620
Number of Citizens affected:	
Value of Citizen Hour	\$10
Total Transaction Savings:	
Other Savings (Describe)	
Total Savings:	\$16,200

ROI Financial Worksheet	
A. Total Annual Pre-Project cost (State Share from Section II C1):	263,981
B. Total Annual Post-Project cost (State Share from Section II C2):	0
State Government Benefit (= A-B):	263,981
Annual Benefit Summary:	
State Government Benefit:	263,981
Citizen Benefit:	16,200
Opportunity Value or Risk/Loss Avoidance Benefit:	0
C. Total Annual Project Benefit:	280,181
D. Annual Prorated Cost (From Budget Table):	7,061
Benefit / Cost Ratio: (C/D) =	.025
Return On Investment (ROI): ((C-D) / Requested Project Funds) * 100 =	113.8

4. Opportunity Value/Risk or Loss Avoidance - Quantify the estimated annual non-operations benefit to State government. This could include such items as qualifying for additional matching funds, avoiding the loss of matching funds, avoiding program penalties/sanctions or interest charges, avoiding risks to health/security/safety, avoiding the consequences of not complying with State or Federal laws, providing enhanced services, avoiding the consequences of not complying with enterprise technology standards, etc.

Response:

Inspectors can spend more time out in the field to meet the EPA commitments for compliance. If DNR can reduce the amount of time spent on documenting and reviewing files they will have more time that can be spent on inspections, this benefits the state of Iowa by having a safer environment, by providing for greater protection of our natural resources. If Inspectors spend more time out in the field, then more time will be coded towards our EPA commitments.

5. Benefits Not Readily Quantifiable - List and summarize the overall non-quantifiable benefits (i.e., IT innovation, unique system application, utilization of new technology, hidden taxes, improving the quality of life, reducing the government hassle factor, meeting a strategic goal, etc.).

Response:

The development of this new system will allow the public, legislators, the media, and the agency access to statewide information that had previously been stored in paper files in offices across the state.

This new system will provide the public with an easier way to view files, by doing it on-line. The public will spend less time and money in finding and reviewing paper files and allow them more time to spend reviewing up to date information. The department will spend less time reviewing paper files and double entering for tracking purposes and have more information readily available for those that need it.

[This section to be scored by application evaluator.]

Evaluation (15 Points Maximum)

- The financial analysis contains several questionable entries and provides minimal financial benefit to citizens (0-5 points).
- The financial analysis seems reasonable with few questionable entries and provides a moderate financial benefit to citizens (6-10 points).
- The financial analysis seems reasonable with no problem areas and provides maximum financial benefit to citizens (11-15).



Appendix A. Auditable Outcome Measures

For each of the following categories, list the auditable metrics for success after implementation and identify how they will be measured.

1. Improved customer service

Auditable Metric:

Visits to the DNR web page will be higher and requests made for records will be reduced.

24-7 availability of information.

Improved data integrity as it's entered once.

How:

Hits to the web page will be tracked.

2. Citizen impact

Auditable Metric:

Visits to the DNR web page will be higher and requests made for records will be reduced.

24-7 availability of information.

Improved data integrity as it's entered once.

How:

Hits to the new web page will be tracked.

Time saved by staff when we have fewer follow-up calls and less time is spent on the gathering of information.

3. Cost Savings

Auditable Metric:

New web based system will shorten the time personnel spends recording, updating, and verifying data.

How:

Inspections increase and compliance is documented in less time.

4. Project reengineering

Auditable Metric:

New web based system will improve access and quality of data while shortening the time it takes to account for and identify compliance.

How:

Inspections increase and compliance is documented in less time.

Visitors to the web site will have the opportunity to respond to a survey and provide feed back to the DNR through a link on the web page.

5. Source of funds (Budget %)

The source of the funds to operate will remain stable.

6. Tangible/Intangible benefits

Auditable Metric:

Improved permit application processing allowing for a 24-7 availability.

Streamlined data management processes.

Reduced number of phone calls to field offices.

Reduction in number of databases to be updated and maintained.

Improved data integrity as it's entered once.

No doubt DNR will be able to use the savings to improve delivery of other services to the public.

The ability of managers to do cross program analysis of compliance.

How:

Greater public satisfaction can be measured with surveys.

Greater compliance with the regulated parties as they can be measured by looking at violations over time.

Time saved by staff when we have fewer follow-up calls and less time is spent on the gathering of information.

Agency could see an increase in other program areas if less time is spent on documenting multiple times and informing other parties of the compliance history of regulated facilities.